



SAN BERNARDINO MICROWAVE SOCIETY, Incorporated

FOUNDED IN 1968

A NONPROFIT AMATEUR TECHNICAL ORGANIZATION DEDICATED
TO THE ADVANCEMENT OF COMMUNICATIONS ABOVE 1000 MC.

W6IFE Newsletter

August 2003 Edition

President **Dick Bremer WB6DNX** 1664 Holley St Brea CA 92621, 714-529-2800, rabremer@sbcglobal.net

VP **Chris Shoaff N9RIN** 2911 Calle Heraldo San Clemente CA 92673, 949-388-3121, cshoaff@netzero.net

Recording Sec **Mel Swanberg, WA6JBD** 231 E Alessandro Blvd Riverside, CA 92508, 909-369-6515, swanberg@pe.net

Corresponding Sec **Kurt Geitner, K6RRA** 1077 E Pacific Coast Hwy #142 Seal Beach, CA 90740, 310-718-4910, k6rra@gte.net

Treasurer **Dick Kolbly, K6HIJ** 26335 Community Barstow, CA 92311, 760-253-2477, rkolbly@compuserve.com

Editor **Bill Burns, WA6QYR** 247 Rebel Rd Ridgecrest, CA 93555, 760-375-8566, bburns@ridgecrest.ca.us

Webmaster Chip Angle, N6CA 25309 Andreo Lomita, CA 90717, 310-539-5395, chip@anglelinear.com

ARRL Interface Frank Kelly, WB6CWN 1111 Rancho Conejo Blvd. #501 Newbury Park, CA 91320, 805-499-8047, fk@event1.com

W6IFE License Trustee Ed Munn, W6OYJ 6255 Radcliffe Dr. San Diego, CA 92122, 858-453-4563, edmunn@compuserve.com

At the **7 August** 2003 meeting of the SBMS will be planning for the up coming contest and some equipment will be available for those who missed the tune-up party or have "fixed" the problems and need another check on equipment operation. The SBMS meets at the American Legion Hall 1024 Main Street (south of the 91 freeway) in Corona, CA at 1900 hours local time on the first Thursday of each month. Check out the SBMS web site at <http://www.ham-radio.com/sbms/>.

SBMS will be having an interest table at the ARRL Southwestern Division Convention Sept 5-7, 2003 in Long Beach. Dave, WA6CGR will be one of the speakers during the convention. Dick Bremer, WB6DNX, 714-529-2800, rabremer@sbcglobal.net. Please note that ARRL did listen and put the convention on a non-contest microwave weekend. Conference registration sheet is included in this newsletter.

Last Meeting- Kerry- N6IZW talked and demonstrated his 47 GHz rig along with Chuck, WB6IGP. Kerry predicts they will be able to make contacts out to several miles. See pictures enclosed. Thanks for the great set of information. Gary AD6FP of Los Altos and Frank W6QI of Mountain view came to talk about join 10 GHz and Up contest ventures. Gary Joined SBMS. Larry KG6EG of Huntington Beach was our other visitor. Welcome. The SBMS Microwave Update 2005 committee was started with Pat, N6RMJ chairman and Doug K6JEY

assisting. San Diego Microwave Group and Western States Weak Signal Group are interested in helping. 27 people present.

Scheduling:

16-17 Aug 10 GHz and Up contest

4 Sept Chuck WA6EXV DSP-10 project

5-7 Sept ARRL South Western Division Convention in Long Beach with SBMS table

13-15 Sep VHF QSO Party

20-21 Sep 10 GHz and Up contest second half

"Wants and Gots" for sale

Want WR90 flex guide 12 ft or more Pat N6RMJ 661-264-1978

Want SMA relay for 24 GHz and 24 GHz circulator Miguel W6YLZ 818-349-8525

Activity reported at the July SBMS meeting- Mel. WA6JBD worked on a TVRO LNA for 10 GHz and has a TWT running at the 30 w level for 5 GHz; Chuck, WA6EXV is working on a DSP-10 software defined radio for 2 meter IF; Ed, W6OYJ participated in the VHF contest with contacts on 1296, 10 GHz and AO-40; Chuck, WB6IGP worked on Bird wattmeters; Kerry, N6IZW worked on some 900 MHz amplifiers and has a rig on 47 GHz which he demonstrated with WB6IGP; Ken W6DTA worked the contest on 6, 2 and 10 GHz; Pat, N6RMJ worked contest on 6 mtrs; Ed, K6ODV made some 1296 contacts with antennas now up; Gary, AD6Fpis working on 47 GHz EME; Frank, W6QI has 24 GHz rig; John, KJ6HZ has antennas up for AO-40; Wayne KH6WZ has a laser station and the 10 GHz station is coming together; Larry KG6EG made a trip into Mexico; Eric, KG6KQT is in school; Chuck, N6EQ made a trip into Mexico and had a 2 mtr contact with Kansas; Jeff, KN6VR has one tower up at new house; Doug, K6JEY did some contacts on 6 1296 and 10 GHz; Dennis, WA6NIA was traveling; Jerry, N7EME worked the contest out of DM44 and has a design for a 1152 synthesizer; Dick, K6HIJ did some experiments on GPS rig radome materials and some work with microwave oven power supply; Glenn, KE6HPZ roamed the SOCAL area with 6 mtr through laser on board; Dave, WA6CGR did lots of building in new shop and 7 contacts on 10 GHz during Field Day; Larry, K6HLH made 1296, 2304, 3456 and 10 GHz contacts during the contest; Miguel, W6YLZ did some 24 GHz work and is fixing the 10 GHz rig; Chris N9RIN is still working on his 10 GHz rig.

Off the web-

Fellow SBMS members: If you purchased one of 900 MHz amplifiers at last week's meeting, or are interested in obtaining one, please contact me off line at: Greg.Bailey@Engineering.SDSU.Edu Unfortunately, the data sheets I provided got separated from the hardware, but there is no panic ... I can e-Mail you a copy. Basically, the amplifier uses an Ericsson dual BJT. The device is rated at 135W @ 900MHz, but my tests demonstrate a conservative 80W to be more typical. Bias supply requires approx. 5 VDC with Vb being adjusted so that $I_c @ Q = 200 \text{ mA}$ with Vcc at 24 V. Write for the handout, sorry for the confusion.

Greg K6QPV

Hola Gents! Palos Verdes X-band beacon is now officially back on the air 100 feet higher than before. It is now completely omni as there are no obstructions. The Channel Islands are completely illuminated so there will be many scattered signals off them. We were completely blocked before to Catalina & San Clemente Islands. Frequency should be 10368.300 as before but we need to confirm. Nothing was changed internally. FYI the difference between PV and Frazier beacons was around 10.6 to 10.7 kHz Frazier being 10368.3107 MHz. I will report SWL reports as they dribble in. Jack in San Diego says it seems a little louder when comparing it to Frazier and he can now hear it in all directions as it is being scattered well. Mucho thanks to KE6HPZ Glenn

who once again put his tower climbing skills to work for all of us. Thanks Glenn!! He will be getting a new T-shirt which says "will install beacons/translators for food" and start hanging out near freeway on ramps. Thanks also to Rick W6ESS who helped in the dismantling from the old site. 73 Chip N6CA

Hello Microwavers and other mountain toppers, Last week I went to a USFS Ranger Station to purchase a new annual "Adventure Pass" for the Southern California Forests. My old one was about to expire. I expected to pay half the \$30 price, since I have one of the Park Service Golden Age Passports. In the past, this offered the 50 percent discount. I was amazed to discover that since April 15, 2003 it is no longer necessary for us "more mature" folks to buy the Adventure Pass if we have a USPS Golden Age passport. The Ranger Station gave me a free plastic holder to display the Golden Age Passport in the front windshield, hanging from the rear-view mirror mount. This is necessary if you park your car in a USFS area requiring the Adventure Pass. The USPS Golden Age Passport is available at USFS and USPS Ranger Stations, National Monuments, etc for a one-time fee of \$10.00. It is a lifetime pass allowing free admission of the holder and all other persons accompanying him in a private non-commercial vehicle to all National Parks, National Memorials, and etc, or any federal entrance fee area of the Dept of Interior and some other federal Agencies. You need proof of age 62 or over to get one. I understand that the new policy for USFS Adventure Passes is a nationwide change. So there are some advantages to getting older!! 73s from Ed Munn, W6OYJ 858-453-4563

The Mt. Vaca Beacon went back on the air Thursday July 24 after Ron, K6GZA performed repairs and modifications. Lars, AA6IW measured the frequency and found the beacon to be -3 Hz from target. Beacon Info: Call Sign: W6ASL / BCN Frequency: 10368.325 Stability: Drift rate is +1 Hz per month Grid Square: CM88WJ Power: 1 Watt output Antenna: 10 db Slot Omni H-Pol Elevation: 2780 Feet AMSL 73...Jim W6ASL

Hi All,

On Tuesday, 17 June 2003 I traveled to the beautiful Snowy Range in Southern Wyoming. The site (DN61UI) is at 10,800 feet msl and is on WY Rt. 130. The location is about 50 miles SW of Laramie WY. It is called 'Libby flat overlook' and has a large parking lot just off the highway. The highway climbs a 7% grade in reaching the site. The path to Louisville/Boulder CO is over the Rocky Mts just north of Longs Pk. The weather was beautiful!! A few cirrus clouds and little or no wind. The mountains north of the site are spectacular. Rugged snow covered peaks!! All the microwave contacts were made using a 4' dish. The rig on 10ghz runs about 1.25 watts. The rig on 2.3, 3.4 and 5.7 runs a nominal 2 watts (2.5w on 2.3 and about 1.9w on 5.7). Liaison was easy on 433.1 MHz, running 50W to a single long yagi. The first contact was on 902.1 MHz. Signals were good and Bill (K0RZ Louisville CO) was full quieting on NBFM. (My 902 rig uses a class C cell phone PA running about 40W) I also communicated with Don (N0UGY Boulder CO) at his home QTH. Don is very near the mountains and must look NW over the Flat Iron range to my location. His signals were very weak, but I was able to copy call/grid on SSB. I answered him on CW. We next moved to 10368.1 MHz. Signals to Bill were S7 on SSB. Nothing further was heard from Don. We worked our way down the bands, with good signals on all bands 5.7, 3.4 and 2.3 GHz. Another 'band slam'!! I next traveled to DN60XX. A site suggested by John (WD4MUO Nederland CO). The trip included 10 miles of 20mph dirt road. This was through the foothills and was a pretty area, but slowed down moving from DN61UI to DN60XX. The site is on a dirt road 1.3 miles past the end of the pavement on WY Rt 10. There is no place to get off the road, so I parked on the edge of the wide dirt road. My GPS showed that there were just a few hundred yards of DN60XX. I tried going on down the road to find a better view to the SE. I immediately ran into DN70AA. I backtracked past some free-range cattle until the GPS showed DN60XX and set up. There were several T storm buildups SE and I could see some of the snow-capped peaks of the Rockies. Liaison on 433.1 was solid, but not as strong as at Libby flat. There was a lot of QSB and flutter. There must have been lots of scatterers in the path. We set up on 902.1 MHz. The signals were weak and very fluttery. We made the contact on CW with no problems. Next we switched to 10368.1 MHz. This was a real surprise. The signals were S7-S8 and about 10 degrees to the left of the path on 902. There was a large amount of flutter, but SSB was Q5. We next moved to 2.3 GHz. Here signals were weaker and there was more QSB than on 10GHz. We completed the contact on voice, but it was not 'conversational' copy. We moved on up the bands. 5.7 GHz was stronger than 3.4 GHz, which is a bit unusual. All the contacts had a lot of flutter and there must have been several scattering areas along the path. Another 'band slam' was complete.

73 Phil, W6HCC



Phil's 5.6 GHz rig in his truck with 433 MHz liaison antenna while out roving.



(above) One of the views provided by Phil, W6HCC/0 was experiencing while out roaming in Southern Wyoming for contacts in Colorado. Lots of wide-open space.

73's Bill

The San Bernardino Microwave Society is a technical amateur radio club affiliated with the ARRL having a membership of over 90 amateurs from Hawaii and Alaska to the east coast and beyond. Dues are \$15 per year, which includes a badge and monthly newsletter. Your mail label indicates your call followed by when your dues are due. Dues can be sent to the treasurer as listed under the banner on the front page. If you have material you would like in the newsletter please send it to Bill WA6QYR at 247 Rebel Road Ridgecrest, CA 93555, bburns@ridgecrest.ca.us, or phone 760-375-8566. The newsletter is generated about the 15th of the month and put into the mail at least the week prior to the meeting. This is your newsletter. SBMS Newsletter material can be copied as long as SBMS is identified as source.

San Bernardino Microwave Society newsletter

247 Rebel Road

Ridgecrest, CA

93555

USA

